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<p>(54) Title: BLISTER PACK FOR PRESENTATION OF AN ARTICLE</p> <div data-bbox="406 1218 1201 1617"></div> <p>(57) Abstract</p> <p>Blister type packaging. The receptacle according to the present invention comprises a transparent shell (1) fastened onto card (2), so as to contain an article (3) bearing a bar code (4). The reading of this code by opto-electronic means through the shell is distorted by ribbings (5) formed on shell (1), facing the code. Thus any confusion between code (4) which is rendered unreadable, and another bar code printed elsewhere on a receptacle is avoided. Application of the present invention is to the blister packaging of boxes of photographic or cinema film which have printed thereon an identification bar code.</p>		

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10 BLISTER PACK FOR PRESENTATION OF AN ARTICLE

The present invention relates to a receptacle for displaying articles and more particularly to a blister pack for presentation of an article, bearing information readable by opto-electronic devices.

15 Many articles are now packed in forms facilitating their commercial distribution. Modern distribution techniques make wide use of blister type packs. In such cases the article to be sold is placed in a housing such as a shell, a bubble or an alveolus made of transparent
20 plastic material, said housing being fastened onto a rigid or semi-rigid card plate or plaque, e.g. of cardboard, to facilitate the hanging of the whole on a display shell. Thus customers of a store equipped with such display shelves can examine and recognize the
25 article contained within the transparent housing. Various characteristics of the article such as its price, possibly its expiry date, its mode of use and technical features, etc. appear on the card. In this way, all the information is immediately available to the customer
30 without the need to turn to a salesman. With this display, the customer can make a decision on whether or not to purchase, more quickly. The customer can serve himself by simply taking down the article so packed from the display shelf. Due to these attractive
35 characteristics, blister type packing is widespread in

stores : it has the advantages of distribution in bulk without the drawbacks of loose display.

The articles displayed in such receptacles might have been packed previously by the manufacturer. Such is the case for film cartridges or cassettes which are normally packed in cardboard boxes having printed thereon various film characteristics intended for the customer's information. Very often the cardboard box also bears coded information used by the manufacturer for automatic identification of the article. For this purpose manufacturers often use bar codes which can be read automatically by opto-electric means, such as scanners with photodiode bar or light pens.

Of course, when such an article is repacked in a blister pack for distribution on display shelves, the bar codes remain perfectly readable through the transparent shell which wraps the article.

Very often, the distributor of the whole receptacle blister/article uses another bar code for managing this product from its entry into stock to its sale to customers. This bar code which is printed for example on the support card of the transparent shell, is used by employees at the point of sale to locate the identification code of the whole. Thus, the employees are faced with products bearing two different bar codes, one relating to the individual articles, the other relating to the whole pack. Very serious errors can result from the reading of the bar code printed on the article instead of the one corresponding to the whole pack. To avoid any confusion, it is necessary to mask the bar codes of the individual articles for example with an auto-adhesive label stuck on the bar code, before repacking the article in a blister pack, a task which requires expensive additional handling.

Thus, the object of the present invention is to make a

blister type receptacle for displaying articles bearing bar codes ; this receptacle prevents any confusion between the code on the article and another bar code borne by the receptacle itself, this protection requiring
5 no expensive additional handling of the article.

This object of the invention is attained with a receptacle comprising a transparent area covering information readable by opto-electronic devices, which is borne by an article contained in the receptacle,
10 characterized in that the section of the transparent area which faces the area of the article bearing information readable by opto-electric devices, has deformations which serve to distort the reading of this information through this transparent area.

15 In the attached drawing given only by way of example :
-Figure 1 is a plan view of a receptacle according to the present invention for displaying an article bearing a bar code ; and

-Figure 2 is a face view of the receptacle represented
20 in Figure 1 which represents the article so displayed and the bar code borne by this article.

Reference is made now to figures 1 and 2 wherein it appears that the receptacle according to the invention is essentially comprised of two parts, wrapping 1 of
25 transparent plastics and support card or support plaque 2, for example of fiberboard. Transparent wrapping 1 is shell-shaped and provides a housing for article 3, which bears bar codes 4 on its outer surface. By way of non-limiting example, article 3 is a parallelepiped box
30 containing a cartridge, or a cassette of photographic or cinema film.

The shell is fixed on card 2 with glue, staples or by thermosealing or any other appropriate means. In particular, it is easy to make a shell by thermoforming a
35 transparent plastics sheet and to have the card itself

covered with plastics film, both plastics being thermosealable together. The filled receptacle of articles can be hung on a crook on the display shelf, by buttonhole 6 pierced in card 2.

- 5 If the whole receptacle/article is itself identified by a printed bar code, for example on support card 2 of the whole, code 4 borne by the article has to be masked. According to a conventional technique, bar code 4 borne by the article is masked, before packaging under blister, 10 by means of an auto-adhesive label of dimensions sufficient to cover the coded area. The reading of this bar code instead of another bar code identifying the whole receptacle/article is thus avoided. Unfortunately, for current articles such as film boxes, such an 15 operation can turn out to be very expensive.

According to the present invention, this difficulty is overcome by using shell 1 provided, at least in the area of the shell facing the bar code of the article, with deformations which serve to distort the reading of this 20 bar code through these deformations. In this way, an operator provided for example with a light pen, and trying to find again a piece of information relating to management (such as an identification code of the whole film box/receptacle) by moving the light pen across code 25 4 reads distorted information, rendered incoherent. Thus the operators detects the error and then looks for another bar code on the receptacle, the one bearing the information searched, and being readable.

According to an embodiment of the present invention 30 distortion is obtained by means of cylindrical ribbings 5 parallel to code bars 4 for optimum efficiency. These ribbings result from the same moulding or thermoforming as entire shell 1 and therefore, their fabrication does not incur any extra expense. The bar code image 35 transmitted by those ribbings is deformed by cylindrical

lens effect resulting in variations in spacing and width of the code bars, at least locally. The code is rendered unreadable, and thus cannot be confused with the bar code of the whole article/receptacle.

- 5 The receptacle according to the present invention has the advantage of distorting the code relating to the article without any additional operation. From this point of view it is thus very inexpensive. This solution is also very efficient, as it has been verified in
- 10 particular for bar codes of types known as EAN or UPC.

The present invention can be extended to several variants of the receptacle above described. The ribbings can be extended to a wider area of the shell, for

15 aesthetical grounds or for ensuring the distortion of the bar code, whatever the positioning of box 4 and thus the positioning of code 4 should be, inside the shell. The deformations can also take shapes different from ribbings as far as they allow to produce the desired effect, i.e. the distortion of the bar code.

- 20 This invention can be extended, in general, to any receptacle exhibiting at least one transparent part through which it is possible to read by opto-electronic means information relating to the article contained in the receptacle which has not to be read when the article
- 25 is displayed. The present invention can be extended in particular to any receptacle of blister type, whatever the form of the transparent part of the receptacle should be, this form resulting from the shape of the article protected or from any other practical or aesthetical
- 30 factor.

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CLAIMS

- 1 - A receptacle for the display of articles comprising a transparent part covering information read by opto-electronic devices borne by an article contained
5 in a receptacle, characterized in that the transparent part, exhibits, facing the area of the article which bears information for opto-electronic detection, deformations appropriate for distorting the reading of information through this transparent
10 part.
- 2 - A receptacle according to claim 1, for an article bearing information readable by opto-electronic devices recorded according to a bar code, characterized in that the transparent part is formed
15 of a sheet bearing deformations in the form of ribbings, facing the area of the article bearing the bar code.
- 3 - A receptacle according to claim 2 characterized in that the ribbings are rectilinear and parallel to the
20 bars of the code.
- 4 - A receptacle according to any of claims 1 to 3 characterized in that it bears itself another bar code intended to be readable.
- 5 - Application of the receptacle according to any of
25 claims 1 to 4 to the display of an article made of a box of photographic or cinema film bearing a bar code.

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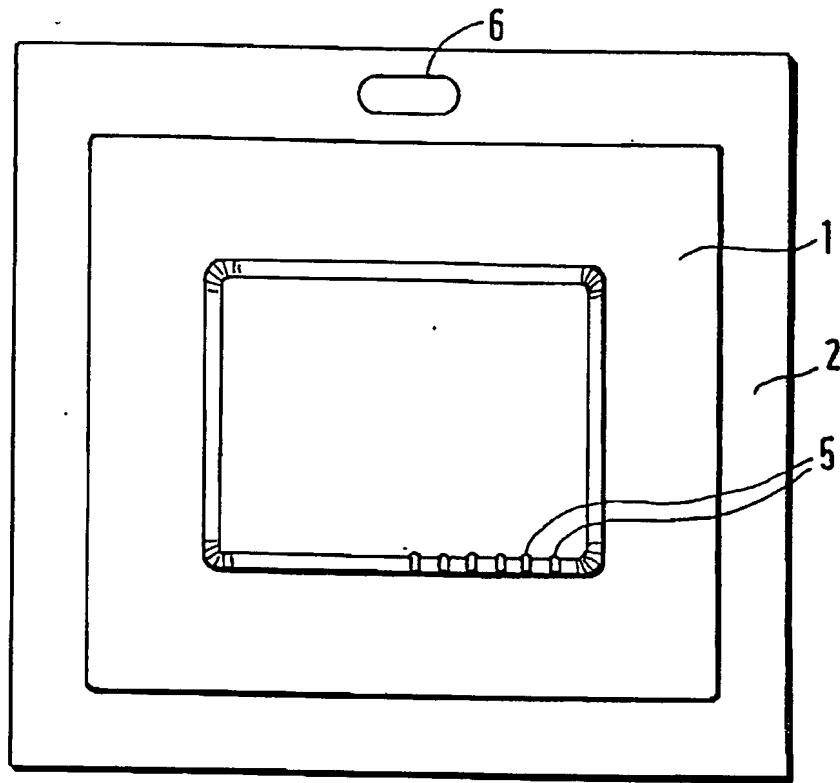


FIG. 1

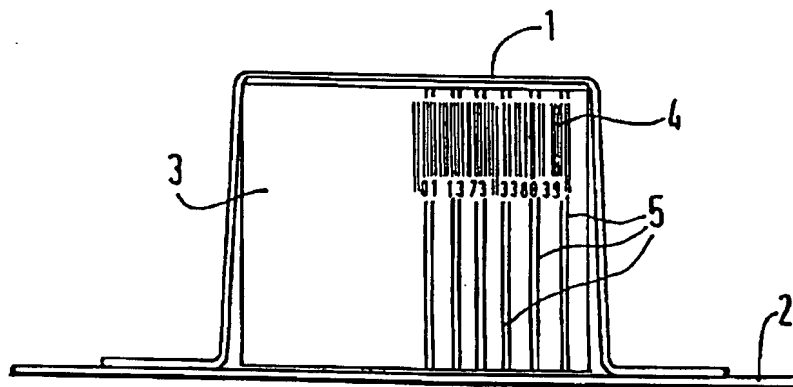
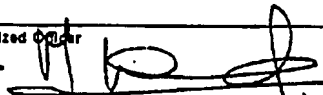


FIG. 2

INTERNATIONAL SEARCH REPORT

International Application No PCT/EP 87/00153

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) *		
According to International Patent Classification (IPC) or to both National Classification and IPC		
IPC ⁴ : B 65 D 75/52; G 06 K 19/00		
II. FIELDS SEARCHED		
Minimum Documentation Searched ⁷		
Classification System	Classification Symbols	
IPC ⁴	B 65 D; G 06 K	
Documentation Searched other than Minimum Documentation to the extent that such Documents are included in the Fields Searched *		
III. DOCUMENTS CONSIDERED TO BE RELEVANT *		
Category *	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
A	FR, A, 2106867 (RAVEL) 5 May 1972 see figures 1-6; page 2, line 22 - page 3, line 13	1
A	US, A, 4255653 (BORKAT et al.) 10 March 1981 see figures 1-7, column 3, line 26 - column 6, line 19	1,2,4
A	DE, B, 1244051 (HERMANN) 6 July 1967 see the whole document	1
A	DE, C, 3306872 (H.J. WINTER) 4 October 1984 see figures 1-6; column 4, line 27 - column 5, line 56	1

<p>* Special categories of cited documents: ¹⁰</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"A" document member of the same patent family</p>		
IV. CERTIFICATION		
Date of the Actual Completion of the International Search		Date of Mailing of this International Search Report
10th July 1987		5 AUG 1987
International Searching Authority		Signature of Authorized Officer
EUROPEAN PATENT OFFICE		M. VAN MOL 

ANNEX TO THE INTERNATIONAL SEARCH REPORT ON

INTERNATIONAL APPLICATION NO. PCT/EP 87/00153 (SA 16649)

This Annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on 21/07/87

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR-A- 2106867	05/05/72	None	
US-A- 4255653	10/03/81	None	
DE-B- 1244051		None	
DE-C- 3306872	04/10/84	None	

For more details about this annex :
see Official Journal of the European Patent Office, No. 12/82